Los Angeles County Museum
Exposition Park
Los Angeles 7, Calif.
October 29, 1945.

Mr. L. F. Brady
922½ Forest Ave.
Tempe, Arizona

Dear Mr. Brady:

Enclosed is a blank to fill out with information about yourself for membership in the Vertebrate Paleo Society. As I have signed it, you would not need to return it to me, but just put it in an envelope and addres it to Dr. Colbert whose address you will find at the bottom of the blank.

I think you will enjoy the Society. The little bulletin which comes out 3 or 4 times a year gives news that you never find anywhere else.

Sincerely

Southwest Regional Editor
News Bulletin

Los Angeles County Museum
Exposition Park
Los Angeles 7, California
July 13, 1945.

Mr. L. F. Brady
Museum of Northern Arizona
Flagstaff, Arizona.

Dear Mr. Brady:

As regional editor for the "southwest" for the Bulletin of the Vertebrate Paleontology Bulletin, I was preparing to write to members in my "territory" and was surprised to discover that your name was not on the list of members in the Society of Vertebrate Paleontology. In fact I find only two members listed from the state of Arizona. So -- I thought something should be done about that.

The Society of Vertebrate Paleontology is still pretty young (the first annual meeting was held in December 1941) but it is very vital. Many of us were former members of the Paleontological Society and felt that the vertebrate group wasn't faring too well there. So we started on our own. We have members who are active in research in the subject of Vertebrate Paleo, and members who are in collateral subjects, and then many who have a great interest in the subject but are not doing research. The dues are only a dollar a year and for that we get the grandest little bulletin, packed full of news of persons, places and work connected with Vertebrate Paleo.

We only take in new members at the annual meeting in the winter, but I should like to have your "yes" so that I can propose your name this coming winter. In the meantime, won't you write and tell me if you have uncovered any more bones, and what goes on with you? Incidentally, aren't there others interested in Vertebrate Paleo in Arizona -- where's Lyndon Hargrave, by the way?

With best wishes,

Sincerely,

Southwest Regional Editor
News Bulletin

Los Angeles County Museum
900 Exposition Blvd.
Los Angeles 7, Calif.
July 19, 1962

Arizona Geological Society
P. O. Box 4443
Tucson, Arizona

Gentlemen:

I see by a recent bibliography of paleontology that John Lance has published on the Stratigraphic and Structural Position of Cenozoic Fossil Localities in Arizona in your Society's DIGEST Volume 3, 1960. I should like to purchase this volume. Will you kindly tell me the cost so that I may send you a check immediately?

Perhaps you can refer me to other published material concerning, particularly, the San Pedro Valley and Wikieup localities.

Yours sincerely,

Hildegarde Howard
Research Associate

HH/h

AMERICAN GEOLOGICAL INSTITUTE
1444 N STREET NW WASHINGTON, D. C. 20005 202—234-2758

March 1968

Dear Colleague:

Once every two years you are asked to provide current information for the National Register of Scientific and Technical Personnel. To this end the American Geological Institute, on behalf of the earth sciences, and twelve other national organizations representing other scientific disciplines cooperate with the National Science Foundation in this important effort.

Your cooperation and assistance are vital to the maintenance of a useful National Register which is used not only to obtain an up-to-date profile of our profession, but to identify those whose special knowledge and ability might suddenly be of paramount importance to our Nation.

Where possible, selected information included in the 1966 National Register has been produced by computer on the enclosed 1968 form. We hope this new procedure will permit you to return your questionnaire immediately. As in the past, your salary and income information will be held in strict confidence.

Salary information and a summary of the background, operations, and uses made of the National Register are enclosed. Additional information on earth scientists has been reported in Geotimes.

Since data developed from this 1968 questionnaire are to be utilized during this calendar year, we urge your immediate reply.

Sincerely yours,

L. L. Sloss

L. L. Sloss
President

Rec'd form 3.27.68

LLS:RML

Enclosures

Member Societies: American Association of Petroleum Geologists • American Geophysical Union • American Institute of Professional Geologists • Association of American State Geologists • Association of Engineering Geologists • Geochemical Society • Geological Society of America • Geoscience Information Society • Mineralogical Society of America • National Association of Geology Teachers • Paleontological Society • Society of Economic Geologists • Society of Economic Paleontologists & Mineralogists • Society of Exploration Geophysicists • Society of Mining Engineers of AIME • Society of Vertebrate Paleontology

rec'd filled in questionnaire Feb 16, 1970

AIBS AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

202/362-6733 3900 WISCONSIN AVENUE, N.W. WASHINGTON, D. C., 20016

2 February 1970

Dear Colleague:

The American Institute of Biological Sciences asks your cooperation every two years in providing current information for the National Register of Scientific and Technical Personnel. The AIBS is one of several national professional societies which cooperates with the National Science Foundation in maintaining the National Register for the scientific community.

The National Register is a basic source of information on the Nation's supply of scientists and publishes summary statistics periodically. The enclosed bulletin provides a summary of the background, operation, and uses made of the National Register. Your salary and income information is held in strict confidence, and released only as statistical aggregates. Other information on individuals is restricted to research study uses and to important Society and Government uses not involving usage for private or commercial purposes. Every precaution is taken to safeguard individual privacy and to insure the professional character of the Register.

Where possible, selected information from the 1968 form has been reproduced on the enclosed 1970 questionnaire. It is hoped that this new procedure will facilitate completion of the questionnaire and avoid repetition of information already collected.

We urge you to complete and return your questionnaire promptly so that data from the 1970 National Register may be compiled and utilized during the calendar year.

Most sincerely,

John R. Olive

John R. Olive
Director

Enclosures

AMERICAN GEOLOGICAL INSTITUTE
2201 M STREET NW WASHINGTON, D. C. 20037 202—296-7950

February 1970

rec'd filled in questionnaire
Feb 16, 1970

Dear Colleague:

We are again asking geoscientists to provide current information for the National Register of Scientific and Technical Personnel. The American Geological Institute and twelve other national professional organizations are cooperating with the National Science Foundation in this important biennial effort.

The National Register is a basic source of information on the Nation's supply of scientists and publishes summary statistics periodically. The enclosed bulletin provides a summary of the background, operation, and uses made of the National Register. Your salary and income information are always held in strict confidence, and released only as statistical summaries. Other information on individuals is restricted to research study uses and to important Institute and Government uses, not for private or commercial purposes. Every precaution is taken to safeguard individual privacy and to insure the professional character of the Register.

Where possible, selected information which respondents provided in the 1968 registration has been printed on the enclosed 1970 form to save time in completion of the questionnaire. Please use the enclosed envelope to return your questionnaire promptly so that we can use the data developed from this 1970 questionnaire during this calendar year. The American Geological Institute appreciates your help and cooperation; we urge your immediate reply.

Sincerely yours,

Linn Hoover
Executive Director

LH:jh
Encl.

Member Societies: American Association of Petroleum Geologists • American Geophysical Union • American Institute of Professional Geologists • Association of American State Geologists • Association of Engineering Geologists • Geochemical Society • Geological Society of America • Geoscience Information Society • Mineralogical Society of America • National Association of Geology Teachers • Paleontological Society • Society of Economic Geologists • Society of Economic Paleontologists & Mineralogists • Society of Exploration Geophysicists • Society of Mining Engineers of AIME • Society of Vertebrate Paleontology

American Association
for the Advancement of Science

1776 MASSACHUSETTS AVENUE, NW, WASHINGTON, D. C., 20036

Phone: 467-4400 (Area Code 202) Cable Address: Advancesci, Washington, D. C.

November 2, 1977

Dr. Hildegarde Howard
2045-Q Via Mariposa E
Laguna Hills, California 92653

Dear Dr. Howard:

I was both amused and distressed by your recent note explaining that you are a 50-year member of AAAS and had recently received a membership recruitment mailing. The problem, as you recognized, was the use of the different names. The computer, of course, had no way of knowing that Hildegarde Howard and Hildegarde Wylde are one and the same person, and I sometimes feel that a computer is running this place and I'm a figurehead.

Along with my mea culpa, you might be interested to know that all this recruiting activity has helped to make AAAS grow by some 10 percent in the past year, reversing a trend in the other direction. This growth should enable us to serve all our members even better in the future. Believe me when I say that 50-year members are a warmly valued part of that membership.

Sincerely,

William D. Carey

William D. Carey
Executive Officer

/jw

American Association
for the Advancement of Science
1333 H Street N.W.
Washington, DC 20005

VOTE

return before Oct 14 88

returned Sept 21, 88

DONE

Non-Profit Org.
U. S. POSTAGE
Paid
New Hyde Park, NY
Permit No. 120

IMPORTANT
AAAS ELECTION BALLOT

G 0083813

AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE
1333 H Street, N.W., Washington, DC 20005

00000046151

HILDEGARDE HOWARD
2045 Q
VIA MARIPOSA E
LAGUNA HILLS CA 92653

PLEASE DETACH

INSTRUCTIONS

1. See biographical information in enclosed brochure.
2. Vote only for the number of candidates indicated.
3. Detach and discard top portion of ballot if you are currently enrolled in an AAAS section or if you do not wish to enroll in a section.
4. If you are not enrolled in a section, please see instructions on reverse.
5. Return marked ballot in envelope provided. Must be postmarked on or before 14 October 1988 to be counted.
6. If you think you have received the wrong ballot, please see instructions on reverse.

If you wish to enroll in a section, enter the section letter code (see reverse) below; detach this portion and mail with ballot.

_____

section letter code

SECTION ENROLLMENT (for members not currently enrolled in a section)

If you want to enroll in **one** of the AAAS sections in whose electorate you wish to vote in the future, please select the section from the list below that most closely corresponds to your interests. Enter the letter code in the gray box on the front. Detach and include the top portion in the envelope with your ballot.

A—Mathematics
B—Physics
C—Chemistry
D—Astronomy
E—Geology & Geography
G—Biological Sciences
H—Anthropology
J—Psychology
K—Social, Economic, & Political Sciences
L—History & Philosophy of Science
M—Engineering
N—Medical Sciences
O—Agriculture
P—Industrial Science
Q—Education
R—Dentistry
S—Pharmaceutical Sciences
T—Information, Computing, & Communication
U—Statistics
W—Atmospheric & Hydrospheric Sciences
X—Societal Impacts of Science & Engineering
Y—General Interest in Science & Engineering

WRONG BALLOT

If you have received a ballot for a section which is not your chosen electorate section, please mail the entire ballot to Linda McDaniel, AAAS Executive Office, 1333 H Street, N.W., Washington, DC 20005, together with a note of explanation.

1988 AAAS Election

(for terms beginning 20 January 1989)

Members of the AAAS:

Voting for Officers and Directors of the professional societies of which you are a member probably seems like an unnecessary bother to many of you. Even so, it is important for you to vote. There are many issues that influence the health and well being of the science and technology enterprise of which you are a part. The AAAS plays a role in influencing this enterprise through its programs and other activities. The strength and effectiveness of these programs depend in part on the interest and dedication of the Officers, the Directors, and the Staff. Deciding who will be the leaders to guide and govern the activities of the AAAS is important. So please take the time to vote for the candidates of your choice.

Sincerely,

Alvin W. Trivelpiece
Executive Officer

The preliminary election announcement in Science *(3 June 1988) included names of candidates and offered members an opportunity to place more names in nomination by petition submitted no later than 18 July. No petitions were received.*

Interviews with candidates for president-elect

Donald N. Langenberg

"The AAAS has a special place as the 'people's association for the advancement of science,' " states Donald N. Langenberg, "in that it represents not only all of the disciplines of science, but also is really a volunteer organization. This increases not only our potential appeal, but our credibility. The effectiveness of the AAAS rests on its broad and diverse membership. It is not elitist, it is not a narrow interest group; the organization does not lobby for money for just one particular project nor for 'big' versus 'little' science. It real-

(continued on next page)

H. Guyford Stever

"Science has served society very well," asserts H. Guyford Stever, "and that service can be strengthened with continued outpourings of scientific research responding to society's ever-growing needs. The AAAS plays an important dual role by aiding science to flourish and by bridging between science and society generally. AAAS's fulfillment of this dual role is its greatest achievement.

"For science to continue to do its full share, it must be well supported in basic research laboratories everywhere, but particularly in

(continued on next page)

Langenberg, continued

ly is as broad and 'popular' as it is possible for such an organization to be.

"Individual scientists and engineers don't usually get involved in the work of the Association to further their own careers—but to advance the work of science. The AAAS provides avenues for scientists and engineers to do this—whether they're spending time as volunteers at their local science museum or making an effort to influence national science policy."

A conventional complaint is the lack of science advice in government. AAAS members, volunteering their time, could make a difference here, asserts Langenberg. "When budgets for science come up for a vote on Capitol Hill, no flood of letters comes pouring in. Too many scientists think that research and politics are uncoupled. Research can be all-consuming, and too few researchers spend any time with their congressperson. Scientists and engineers need to become more involved in the political process. It's no accident that science and technology have been absent from the presidential candidate debates, and that's a real disservice to the country.

"Improving the popular understanding of science and technology—whether before a congressional committee, in a science museum, through the pages of *Science*, or in programs aimed at the science classroom—is fundamentally what AAAS is all about," says Langenberg, who is chancellor of the University of Illinois at Chicago.

The area of science education, he notes, is critical because of the generally poor state of the U.S. educational enterprise. "There are mixed indications as to how effective our science education efforts are. Surveys show significant interest in science by the public. Science museums are very well attended. The Chicago Museum of Science and Industry, for example, runs numerous programs for the public and they're all very popular. The general level of public *understanding* may be improving. But our *performance* internationally, versus the Japanese in mathematics for example, is depressing. Americans are not less talented, so it must be something else and we must figure out what is wrong with our educational system and address it. There has been some awareness at least, since the release of *A Nation at Risk* in 1983, but we've got a lot to do. The AAAS is trying hard, with Project 2061 and other things."

One issue of particular concern to Langenberg is the underrepresentation of women and minorities in science and engineering. "We're reaching out to women and minorities, but not to the extent we must. What successes we've had are partly through the efforts of AAAS and other like-minded associations, and these results are beginning to show. But we've come to the place where we must realize that equity isn't just what's right, it's a matter of national survival. Our failure to exploit properly the talents of women and minorities is more than just bad business, it's suicidal. Talent is not common, and we need all we can get. As a nation it is stupid not to take full advantage of all the talent that resides here.

"But that is easier said than done. At every step of the way, from kindergarten through the Ph.D. level, we tell minority kids that they can't make it; we tell girls that math is too hard for them; we present both with role models they can't relate to. We just aren't doing a good job of bringing these young people forth and educating them to become scientists and engineers.

"I do think, though, that there's some light at the end of the tunnel. We've had some success at my own institution, at least at the undergraduate level. Convincing young people to pursue an advanced degree when the rewards look less than impressive is difficult, but over the next decades market forces should ameliorate some of those problems, at least in some of the high-demand areas."

On other issues in the public eye, Langenberg says he'd like to see the Association take a fairly activist role when major controversies involve science. "*Science* magazine can be a powerful tool, and the Association itself should not shy away from controversy. When the content of a national debate is scientific, we shouldn't take a back seat. Clinging to the role of informed but neutral adviser can lead you into difficulty. Some debates are unavoidably emotional and irrational and if you take a stand you may be attacked, but I believe it is the AAAS's civic responsibility to play as strong a role as possible in political debates over issues involving scientific and technical components. One such case is the controversy over 'creationism.' As a national association of scientists and engineers we have a responsibility to take part in these debates."

Some of the programs of the Association, says Langenberg, have a strong political component. "But most important things are in some sense political, including things in the field of science and technology. While the audience for programs such as the Committees on Scientific Freedom and Responsibility, or Science, Arms Control, and National Security, may not be large, they are intensely involved and their partnership with AAAS can over time involve more scientists and engineers whose interest was stimulated through the Association.

"This bringing together of scientists from different disciplines and helping them work on important interdisciplinary issues goes back to the fundamental strength of the Association. Where the AAAS has succeeded in the past it has used this uniqueness; where it has not it is often because it has not exploited that uniqueness."◆

Stever, continued

the universities where research and education have their strongest symbiosis, and where long-term continuity of support is essential. Long-term scientific strength is especially dependent on quality science education at all levels.

"But to serve society with strong science, we must also know and have great interactions with many nonscientific institutions that have problems that are impacted by science and technology. In fact, science is a very important partner in so many fields of activity, in government and in society as a whole, that we need a very broad exposure to all segments, so that we can understand the problems to enable us to work toward solutions. The AAAS is particularly strong, perhaps the most effective organization in the entire scientific community, in highlighting that interaction.

"We all know that scientific research progresses through the interchange of knowledge—written and spoken—and the AAAS forums and meetings as well as its publications strengthen that interchange. Interestingly," notes Stever, "the sciences themselves are becoming both more interdisciplinary and more interdependent. To have all the sciences come together in AAAS activities is another strength of the Association."

Stever, who served as director of the National Science Foundation and science and technology adviser to President Ford, observes that, "we pay a lot of attention to science at the highest levels in both the White House and Congress and many believe that the White House connection is not as strong as it formerly was. Surely we must strengthen the voice of science in the White House and, just as important, Congress, for Congress is playing an ever greater role in directing the use of science toward problems in our society, as well as controlling the flow of funds to scientific research.

"There are a number of ways to make the voice of science heard

more effectively in the White House. The strengthening of the White House Science Council is important, but the acceptance of science advice in the White House is not so dependent on organization as it is on the interest of the president himself and the ability of the science adviser to interact with both the scientific community and the other power centers in the White House, particularly the Office of Management and Budget, the National Security Council, and the Domestic Council.

"It is critical to recognize that most science issues don't come to the White House as 'science' at all, but rather as components of questions of health, national security, environment, international competition, energy, transportation, arms control, foreign affairs, etc. It's important for AAAS to join in partnerships with other government groups and agencies. One of the best ways to help is to encourage more scientists to accept key posts throughout the government."

Stever, who has served as foreign secretary for the National Academy of Engineering, feels strongly about the U.S. role in international science and technology. "When we say 'American' in the context of international science and technology, we should mean an American presence and participation in addressing worldwide issues. The problems facing us are global, be they health, economics, weather, or arms control.

"One of the biggest issues in this presidential election year is 'industrial competitiveness,' and the recognition that the U.S. is slipping in many areas. This affords us—the scientific community—the opportunity to demonstrate the importance of science in the total economic strength of our country. It also gives us the chance to share and learn from other countries. When other countries are seen as competitors or enemies, barricades, in the name of industrial secretiveness or national security, often are set up to an exchange of ideas. But all of science, as well as economic well-being, advances when we can interchange effectively with the rest of the world; such interchange makes us good world citizens."

Having visited some 45 countries and worked on scientific exchanges in almost all of them, Stever advocates getting more scientists and engineers involved in face-to-face exchanges. "Country-to-country exchanges are effective but can become excessively bureaucratic. Smaller, scientist-to-scientist exchanges are better and we should support more of that, just as we support the individual investigator in research."

On another matter vital to science, Stever expresses concern. "It is very clear that our educational system has some serious weaknesses, particularly at the lower levels. We're good at educating scientists in the universities, but not as effective at appealing to talented young people to get them to enter scientific studies. In spite of problems, though, I do think the trend is positive for science education. More people are aware of the issues and are working to address them. There are many innovative programs now being tried and many have proved effective. The AAAS should encourage and support these efforts. It also should work to make scientific careers more attractive for American men and women, and for minorities and foreign-born."◆

General Election

For president-elect, members of the Board of Directors, and members of the Committee on Nominations

President-elect *(one to be elected for a 3-year term, the second year as president, the third year as chairman of the board)*

Donald N. Langenberg
X H. Guyford Stever

Donald N. Langenberg (physics, academic administration), 1932; B.S., 1953, Iowa State University; M.S., 1955, University of California, Los Angeles; Ph.D., 1959, University of California, Berkeley. Chancellor, University of Illinois, Chicago, since 1983. Previously with Hughes Research and Development Laboratories, University of California, Berkeley, University of Pennsylvania, and National Science Foundation (deputy director). Sloan fellow, 1962-64; Guggenheim fellow, 1966-67; John Price Wetherill Medal, Franklin Institute, 1975; Distinguished Contribution to Research Administration Award, Society of Research Administrators, 1983; chair, Division of Condensed Matter Physics, American Physical Society, 1978-79. Current activities: Board of Trustees, Alfred P. Sloan Foundation; Board of Directors, National Commission for Cooperative Education; Executive Committee and chair, Committee on Federal Legislation, National Association of State Universities and Land-Grant Colleges; chair, Panel on Information Technologies and the Conduct of Research, Committee on Science and Engineering Public Policy, National Academy of Sciences; chair, Advisory Committee for Astronomical Sciences, Subcommittee on NSF Radio Astronomy Facilities. AAAS activities: chair, Section on Physics, 1982-83; Council, 1983-89; Board of Directors, 1985-89; Audit Committee, 1988—; chair, Prize Committee, 1988—; Panel of Judges, AAAS–Westinghouse Award for Public Understanding of Science and Technology, 1988—.

H. Guyford Stever (aeronautical engineering), 1916; A.B., 1938, Colgate University; Ph.D., 1941, California Institute of Technology; recipient of numerous honorary degrees. Foreign secretary, National Academy of Engineering, since 1984. Previously with Massachusetts Institute of Technology, Carnegie-Mellon University (president), U.S. Air Force (chief scientist), National Science Foundation (director), and Office of Science and Technology Policy (director); science advisor to the President, 1973-76; White House science and technology advisor to President Ford, 1976-77. Member, National Academy of Sciences and National Academy of Engineering; Scott Gold Medal, American Ordnance Association, 1960; Distinguished Public Service Medal, U.S. Department of Defense, 1969; president, American Institute of Aeronautics and Astronautics, 1960-62; chair, Science Advisory Board to chief of staff, USAF, 1962-69, and Aeronautics and Space Engineering Board, NAE, 1967-69; National Science Board, 1970-72; chair, US/USSR Joint Commission on Science and Technology Cooperation, 1973-77, and Assembly of Engineering, NAS, 1979-83. Current activities: Boards of Directors, TRW, Inc., and Schering-Plough Corporation; trustee, Woods Hole Oceanographic Institution and Science Service.

Board of Directors *(two to be elected for 4-year terms)*

X Mary Ellen Avery
Francisco J. Ayala
Homer A. Neal
X David Perlman

Mary Ellen Avery (pediatrics), 1927; A.B., 1948, Wheaton College; M.D., 1952, Johns Hopkins University. Thomas Morgan Rotch professor, Harvard Medical School, since 1974. Previously with Johns Hopkins University, Mc-

Mary Ellen Avery

Gill University, Montreal Children's Hospital, and Children's Hospital, Boston. John and Mary Markle scholar, 1961-66; Mead Johnson Award, Society for Pediatric Research, 1968; Trudeau Medal, American Lung Association, 1984; president, SPR, 1972; Council, Institute of Medicine, 1987. Current activities: Maternal Child Health Research Committee, National Institutes of Health; Standing Committee, International Pediatric Association; Editorial Boards, *Clinical Investigative Medicine* and *Medicine*.

Statement by Dr. Avery:

"The future of a civilized America requires that its citizens be informed about advances in science, the scientific methodology that underlies them, and that these citizens continue to support education and research to advance human well-being. A serious threat to our civilization is a generation of citizens who reject the findings of scientific research in favor of 'beliefs' about the forces of nature, especially when they insist that those 'beliefs' be imposed on other people. As a pluralistic society, we need to respect others' opinions. At the same time, we should agree that people do not usually react irrationally; they react on the basis of ignorance or misinformation.

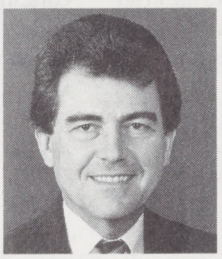
"The principal role of the AAAS should be to make scientifically based information and news about new discoveries as widely available as possible. A national organization that provides a forum for all the sciences is unique. When that organization sponsors a weekly journal read by thousands of scientists, journalists, politicians, and interested citizens, it is obviously serving a very important function. The technical reports augmented by editorials and timely reviews are clearly serving the purpose of providing the entire scientific community with an overview of the thinking in disparate disciplines.

"We need to set priorities with respect to the importance of issues that require scientific knowledge for their ultimate solution. The membership of AAAS is both large enough and broadly representative to assist in this endeavor. I would place the continuing efforts to eliminate nuclear weapons first. At this time a major effort to prevent AIDS must rank very high. In addition to the first two, I would urge governments to address the issues of poverty and associated hunger by imaginative approaches to food production and distribution. We need to support WHO and UNICEF goals of universal immunization to eliminate measles and polio and to lessen the impact of other infectious diseases of childhood. And finally, a high priority should be given to the need to educate the people of the world about the importance of family planning.

"Much of modern research is focused. The investigators pursue a given theme; one answer leads to the next question, and more and more knowledge accumulates on the assumption that the universe is understandable. The reductionists in research are, not surprisingly, the first to acknowledge the need for a context for their findings. Microstudies and macrostudies may proceed in parallel, but we hope not in isolation. The findings of one discipline are always of interest, and often relevant to advances in another. Meetings and publications are the vehicles of this interchange.

"The often unstated goal of scientific research is to bring new knowledge to promote human well-being—in the broadest possible context. Difficult as it may seem, scientists must interact with each other, as well as with other educators, politicians, the press, and the public to maximize the potential of new knowledge for the health of people and the preservation of the environment."

Francisco J. Ayala



Francisco J. Ayala (biology), 1934; B.S., 1955, University of Madrid; M.A., 1963, and Ph.D., 1964, Columbia University. Distinguished professor of biological sciences, University of California, Irvine, since 1987. Previously with Rockefeller University and University of California, Davis. Member, National Academy of Sciences; Guggenheim fellow, 1977-78; Fulbright fellow, 1979 and 1981; W. E. Key Award, American Genetics Association, 1985; Scientific Freedom and Responsibility Award, AAAS, 1987; secretary, American Society of Naturalists, 1974-77; president, Society for the Study of Evolution, 1980. Current activities: Council and Council Committee on International Affairs, NAS; chair, Board on Basic Biology, National Research Council; Commission on Life Sciences, NAS–NRC; Nominating Committee, American Academy of Arts and Sciences; International Committee, International Congress of Systematic and Evolutionary Biology; member of many editorial boards. AAAS activities: Section Committee, Section on Biological Sciences, and Council, 1970-71.

Statement by Dr. Ayala:

"As a director I would promote the AAAS activities with respect to (1) the quality of science, (2) science education, and (3) societal needs.

"AAAS contributes to the quality of science in the U.S. through the publication of *SCIENCE*, the organization of symposia, and in other ways. The AAAS needs to get increasingly involved in the formulation of public policy in matters of science and technology. Our nation devotes a pitiful fraction of the GNP to the scientific enterprise, wherein, nevertheless, lies the greatest promise for continued economic development and for the alleviation of many societal problems. The AAAS must strive towards securing greater financial resources for the support of scientific research.

"The public-at-large is scientifically illiterate; thus, people fall prey to astrology, anti-evolutionary creationism, and other forms of pseudoscience. The AAAS (through its Project 2061) is making a large effort towards reformulating the science curriculum in grades K to 12. This effort must be continued. We must persuade the media, and cooperate with them, to provide accurate scientific information and education to the public. The AAAS must also seek the improvement in colleges and universities of science education—not only for science teachers and science majors, but for all college students so that they achieve a reasonable degree of scientific literacy. The educational mission of AAAS extends to securing greater resources for the support of graduate and postgraduate training in the sciences.

"Scientific and technological advances have been a mixed blessing for society. The AAAS responsibilities stretch to environmental ailments, such as pollution, acid rain, and hazardous waste disposal; a major contribution to these problems is the galloping growth of human populations. The AAAS cannot ignore these societal issues and in dealing with them, it must seek cooperation with scientists in other parts of the world. I would, indeed, want to see increased the international activities of the AAAS."

Homer A. Neal

Homer A. Neal (high energy physics), 1942; B.S., 1961, Indiana University; M.S., 1963, and Ph.D., 1966, University of Michigan. Department chair and professor of physics, University of Michigan, Ann Arbor, since 1987. Previously with Indiana University and State University of New York, Stony Brook. National Science Foundation fellow, 1966-67; Sloan Foundation fellow, 1968; Guggenheim fellow, 1980-81; National Science Board, 1980-86. Current activities: Science, Mathematics, and Engineering Advisory Committee and chair, Physics Advisory Committee and Director's Committee on Facilities, NSF; chair, Government Roundtable Steering Committee on Career Choices of the Best and Brightest Students, National Academy of Sciences; High Energy Physics Advisory Panel Committee on Future Modes of Research in Experimental High Energy Physics, U.S. Department of Energy.

Statement by Dr. Neal:

"Over the past several years I have been involved in various activities associated with science education, both at the national policy level and through specific university-based initiatives. As a

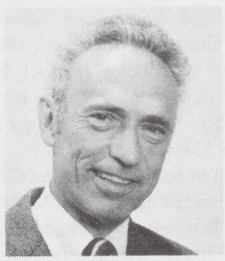
member of the National Science Board, and vice chairman of the Board's Committee on Human Resources, I actively participated in the current revitalization of the National Science Foundation's science education efforts at the pre-college, undergraduate, and graduate levels. In 1985–86 I chaired the Science Board's Task Force on Undergraduate Science, Engineering, and Mathematics Education, the work of which produced a blueprint for several new NSF initiatives which are now being implemented. As provost, I guided a major curriculum reform at the State University of New York at Stony Brook which had as one of its focal points the improvement of the level of technological literacy of all students.

"I firmly believe that the nation must make a concerted effort to repair the deficiencies that now exist in our science education efforts. We are failing to convey the excitement of science to our pre-college and college students. We give insufficient attention to the science curriculum and to providing appropriate instrumentation for our instructional laboratories. Moreover, the reward system at many universities sends confusing signals to faculty regarding the importance of teaching. Responsibility for improving this situation must be broadly shared. Progress in remedying these problems will require the involvement of the federal agencies, the states, boards of trustees, local school boards, industry, professional societies, and university faculty.

"By any assessment, the years ahead will be ones that demand of the general public an increased level of technological and scientific awareness. Moreover, acute shortages in many disciplines will occur if we are not successful in convincing a large fraction of our best students to consider science, mathematics, and engineering careers. In addressing these realities, the country can no longer afford to minimize the importance of the talent pool represented by minorities and women.

"Much of the framework for the discussion of the federal budget over the past year has been centered on the issue of economic competitiveness; any thrust to increase our competitiveness in the long term will surely fail if we ignore the many signs of decay in the quality of our science education. This challenge is, beyond a doubt, one which the AAAS should aggressively embrace as a major agenda item for the decade ahead."

David Perlman



David Perlman (journalism), 1918; A.B., 1939, and M.S., 1940, Columbia University. With San Francisco *Chronicle* since 1951; science editor since 1960 and associate editor since 1979. Previously with New York *Herald Tribune* and *Collier's Magazine*; regents professor, University of California, San Francisco, 1974; visiting lecturer, China Association for Science and Technology, 1983. Poynter fellow, 1984; Carnegie Corporation fellow, 1986-87; Atomic Industrial Forum Award and AAAS–Westinghouse Science Journalism Award, 1975; Ralph Coates Roe Medal, American Society of Mechanical Engineers, 1978; Exploratorium Award for Science Journalism, 1980; Fellows Medal, California Academy of Sciences, 1985; president, National Association of Science Writers, 1970-71, and Council for Advancement of Science Writing, 1976-80. Current activities: Executive Committee, CASW; trustee, Scientists' Institute for Public Information; Advisory Board, Center for Health Communication, Harvard School of Public Health; Advisory Committee, John S. Knight Fellowship Program for Science Journalists, MIT. AAAS activities: Committee on Public Understanding of Science and Technology, 1973-75 and 1985—; Editorial Board, *Science 80–86*, 1979-86.

Statement by Mr. Perlman:

"A major mission of the AAAS is to enhance the public's *understanding* of science and technology, and although understanding need not necessarily equate with affection or unthinking acceptance, public support of science and rational public policy on science-based issues are impossible without an understanding of the scientific enterprise.

"During the seven years that preceded the death of *Science 86*, AAAS committed a major portion of its resources for an adventurous, lively, and vital effort at fulfilling its mission to the public. It was a worthy venture that fell victim only to economic phenomena beyond the magazine's power to control. We need to seek new avenues now for the Association's commitment to the public.

"First, the AAAS should devote a far higher priority than it does now to working with other organizations that seek to place scientific literacy at the very heart of our American school programs. No newspaper, no television program, no museum can convey fresh information on science without an audience already made receptive and attentive by successful curricula in the sciences that begin in the lowest school grades and continue through high school and college. Those classes must be taught by educated, motivated, and adequately paid teachers, and this means placing AAAS in the forefront of the effort to reform our entire science teaching enterprise.

"Next, the AAAS must intensify its efforts to build beyond that educational reform movement and develop new initiatives through the mass media, with a realistic understanding of the real media world. There are new opportunities for collaboration with other organizations devoted to the same goals as AAAS, including Sigma Xi, the Scientist's Institute for Public Information (whose Media Resource Service now numbers 20,000 participating scientists), the National Academy's press service, the National Association of Science Writers, and the American Medical Writers' Association.

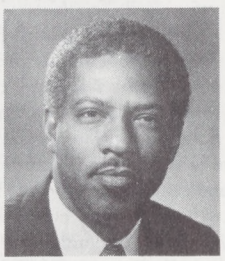
"Finally, the annual meetings of AAAS, examined realistically, have been plagued by problems of attendance and inattention in recent years. But each meeting occurs in a major American city, with populations that range from 500,000 to 7 million. In how many of those cities has the annual meeting had a major impact on the local community? Why has each AAAS meeting not been an occasion for a widespread community effort at promoting science awareness for the general public in the city where the meeting is held? To this journalist who has been covering AAAS meetings regularly for some 25 years, our organization could well devote a far more effective effort to making the annual meetings truly public occasions. It would take initiative, imagination, leadership, and underwriting. But it could be done.

"Education at the base, and public understanding through more effective communication, are crucial keys to a scientifically enlightened society."

Committee on Nominations *(four to be elected for 2-year terms)*

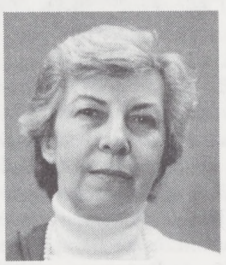
- Thomas W. Cole, Jr.
- Mary Grace Kovar
- Ernest Shiu-Jen Kuh
- William A. Lester, Jr.
- Joel R. Primack
- Anthony Robbins
- William M. Sangster
- William D. Sawyer

Thomas W. Cole, Jr.



Thomas W. Cole, Jr. (education, chemistry), 1941; B.A., 1961, Wiley College; Ph.D., 1966, University of Chicago. President, Clark College, Atlanta, beginning in 1988. Previously with Atlanta University, West Virginia State College, and West Virginia Board of Regents. Southern Regional fellow, 1961; Woodrow Wilson fellow, 1961-62. Current activities: Advisory Board, WPBY–TV.

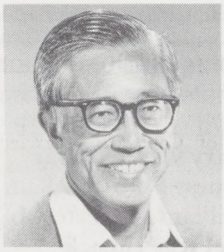
Mary Grace Kovar



Mary Grace Kovar (statistics, epidemiology), 1929; B.S., 1951, and M.S., 1955, Univer-

sity of Pittsburgh; Dr.Ph., 1982, University of North Carolina. Special assistant for data policy and analysis, Office of Vital and Health Statistics Systems, National Center for Health Statistics, Hyattsville, Maryland, since 1982. Statistics Section Award, American Public Health Association, 1984; Board of Directors, 1972-75, and secretary-treasurer, 1975-78, Population Association of America; Governing Council, APHA, 1983-88; president, Washington Statistical Society, 1984-86. Current activities: chair, Social Statistics Section, American Statistical Association; Editorial Board, APHA; Research Board, Alan Guttmacher Foundation. AAAS activities: Section Committee, Section on Statistics, 1986—.

Ernest Shiu-Jen Kuh

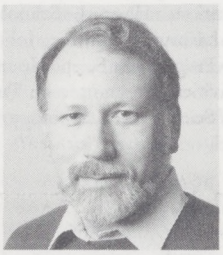


Ernest Shiu-Jen Kuh (electrical engineering, computer sciences), 1928; B.S., 1949, University of Michigan; S.M., 1950, Massachusetts Institute of Technology; Ph.D., 1952, Stanford University. With University of California, Berkeley, since 1956; professor since 1962. Previously with Bell Telephone Laboratories. Member, National Academy of Engineering; Education Medal, 1981, and Centennial Medal, 1984, Institute of Electrical and Electronics Engineers; Lamme Medal, American Society for Engineering Education, 1981; president, Circuits and Systems Society, 1972; Board of Directors, 1976-77, and chair, Awards Board, 1987, IEEE. Current activities: advisory editor, *International Journal of Networks*; Committee on International Cooperation in Engineering, NAE; Panel on Information, Communications, Computation, and Control Systems Research, National Research Council.

William A. Lester, Jr.

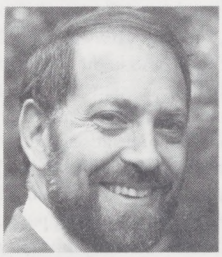
William A. Lester, Jr. (chemistry), 1937; B.A./B.S., 1958, and M.S., 1959, University of Chicago; Ph.D., 1964, Catholic University. With Lawrence Berkeley Laboratory since 1978; faculty senior scientist since 1981. Professor, University of California, Berkeley, since 1981. Previously with National Bureau of Standards, University of Wisconsin, Madison, and IBM Corporation. Percy L. Julian Award in Pure or Applied Research, 1979, Outstanding Teacher Award, 1986, and National Executive Board, 1984-87, National Organization of Black Chemists and Chemical Engineers; secretary-treasurer, Wisconsin Section, 1967-68, treasurer, Division of Computers in Chemistry, 1974-77, and chair, Division of Physical Chemistry, 1979, American Chemical Society; chair, Division of Chemical Physics, American Physical Society, 1986-87. Current activities: Army Basic Research Steering Committee, National Research Council. AAAS activities: Section Committee, Section on Chemistry, 1986-88.

Joel R. Primack



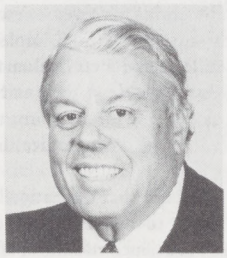
Joel R. Primack (theoretical physics, cosmology), 1945; A.B., 1966, Princeton University; Ph.D., 1970, Stanford University. With University of California, Santa Cruz, since 1973; professor since 1983. Previously with Harvard University. Sloan fellow, 1974-78; Forum on Physics and Society Award, American Physical Society, 1977; National Council, Federation of American Scientists, 1970-74. Current activities: Steering Committee, University of California Institute on Global Conflict and Cooperation; Joint Disarmament Project, FAS and Committee of Soviet Scientists. AAAS activities: Youth Council, 1972; Committee on Science in the Promotion of Human Welfare, 1973-74; Committee on Scientific Freedom and Responsibility, 1976-80; chair, Subcommittee on Infringements of Scientific Freedom in Foreign Countries and Clearinghouse on Science and Human Rights, 1978-80; designed Congressional Science Fellowship Program.

Anthony Robbins



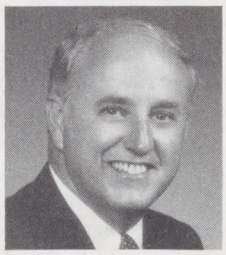
Anthony Robbins (public health), 1941; B.A., 1962, and M.P.A., 1969, Harvard University; M.D., 1966, Yale University. Professor, Boston University School of Public Health, since 1987. Previously with Beth Israel Hospital, Harvard Center for Community Health and Medical Care, McGill University, State of Vermont, Colorado Department of Health, National Institute for Occupational Safety and Health (director and assistant surgeon general), and Committee on Energy and Commerce, U.S. House of Representatives. President, American Public Health Association, 1983. Current activities: Boards, Physicians Forum and Environmental Policy Institute. AAAS activities: Section Committee, Section on Medical Sciences, 1983—.

William M. Sangster



William M. Sangster (engineering), 1925; B.S.C.E., 1947, M.S., 1948, and Ph.D., 1964, University of Iowa. With Georgia Institute of Technology, Atlanta, since 1967; dean, College of Engineering, since 1974. Previously with University of Missouri. National Science Foundation fellow, 1962-63; Engineer of the Year in Education, Engineers of Greater Atlanta, 1974; Missouri Honor Award for Distinguished Service in Engineering, 1975. Current activities: Finance Committee and vice chair, Engineering Manpower Commission, American Association of Engineering Societies; Board of Directors, Engineering Foundation; Advisory Committee for International Programs, NSF. AAAS activities: chair, Steering Committee, Consortium of Affiliates for International Programs.

William D. Sawyer



William D. Sawyer (medicine), 1929; M.D., 1954, Washington University. President, China Medical Board of New York, Inc., since 1987. Previously with Johns Hopkins University, The Rockefeller Foundation (Bangkok), Indiana University, and Wright State University; visiting professor, University of Oxford, 1979-80. Chair, Association of Medical School Microbiology, 1973-80, Bacterial Pathogenicity Division, American Society for Microbiology, 1981-82, and Section on Community-Based Medical Schools, Association of American Medical Colleges, 1984-86. Current activities: Public Relations Committee, ASM; Board, treasurer, and chair, Committee on Education and Training, Interciencia Association. AAAS activities: Steering Committee, Consortium of Affiliates for International Programs; AAAS representative to the Interciencia Association.

Section G — Biological Sciences: Electorate Election for Section chair-elect, member-at-large of the Section Committee, members of the Electorate Nominating Committee, and Council delegates

Chair-elect *(one to be elected for a 3-year term, the second year as chair, the third year as retiring chair)*

X Eloise E. Clark
Michael G. Hadfield

Eloise E. Clark (education research administration, biology), 1931; B.A., 1951, Mary Washington College; Ph.D., 1957, University of North Carolina. Vice president for academic affairs and professor, Bowling Green State University, Bowling Green, Ohio, since 1983. Previously with University of North Carolina, Greensboro, Columbia University, and National Science Foundation. Current activities: National Advisory Research Resources Council, National Institutes of Health; chair, Equal Opportunity Committee, Academic Affairs Division, National Association of State Universities and Land-Grant Colleges; Panel on Informal Science Education and Research Centers of Excellence Review Panel, NSF; National Committee on Qualifications, Phi Beta Kappa. AAAS activities: Section Committee, Section on Biological Sciences, 1967-70; Council, 1967-70 and 1978-81; Board of Directors, 1978-81; Committee of Judges, Radio Award, 1983-84, and Screening Committee, Print Awards, 1987—, AAAS–Westinghouse Science Journalism Awards; Committee on Nominations, 1984-86.

Michael G. Hadfield (developmental biology, life-history studies), 1937; A.B., 1959, and M.S., 1961, University of Washington; Ph.D., 1967, Stanford University. With University of Hawaii, Honolulu, since 1968; professor since 1979. Previously with Pomona College; visiting professor, Friday Harbor Laboratories, University of Washington, (summers) 1968, 1978, 1981, 1984, 1986, and 1988, and University of Guam Marine Laboratory, (summer) 1980; visiting assistant professor, Santa Catalina Marine Laboratory, University of Southern California, 1971. Fulbright fellow, 1961-62; Japanese Government Award for Foreign Scientists, 1987. Current activities: Editorial Board, *Pacific Science*; research associate in zoology, B. P. Bishop Museum.

Member-at-large of the Section Committee *(one to be elected for a 4-year term)*

Oswald G. Baca
X G. Ken Creighton

Oswald G. Baca (microbiology), 1942; B.S., 1966, and M.S., 1969, University of New Mexico; Ph.D., 1973, University of Kansas. With University of New Mexico, Albuquerque, since 1976; professor and associate dean of graduate studies since 1986. Previously with Friedrich Miescher Institute and University of Minnesota. President, New Mexico Branch, American Society for Microbiology, 1981-83; treasurer, Society for the Advancement of Chicanos and Native Americans in Science, 1982-86. Current activities: secretary-treasurer, American Society for Rickettsiology and Rickettsial Diseases; Fellowship Evaluation Panel in Genetics, National Research Council; organizer, 1988 National Meeting, ASRRD.

G. Ken Creighton (ecology, systematics), 1951; B.Sc., 1976, University of Massachusetts; M.A., 1983, and Ph.D., 1984, University of Michigan. Research associate, Division of Mammals, National Museum of Natural History, Smithsonian Institution, beginning in 1988. Previously with University of Michigan, The Nature Conservancy Interntional Program, Conservation International Foundation, and World Wildlife Fund–U.S.

Members of the Electorate Nominating Committee *(two to be elected for 3-year terms)*

X Franklin Fong
Nancy H. Marcus
Marjorie L. Reaka
X Mary Beth Saffo

Franklin Fong (plant physiology), 1947; B.S., 1969, University of California, Davis; Ph.D., 1975, University of California, Riverside. With Texas A&M University, College Station, since 1978; associate professor since 1985. Previously with Brandeis University. Secretary, 1984, and chair, 1985, USDA Cooperative Regional Program on Air Pollution Effects on Crops; secretary-treasurer, 1986, and vice chair, 1987, Southern Section, American Society of Plant Physiologists. Current activities: chair, Southern Section, ASPP.

Nancy H. Marcus (biological oceanography), 1950; B.A., 1972, Goucher College; Ph.D., 1976, Yale University. Associate professor, Florida State University, Tallahassee, since 1987. Previously with Woods Hole Oceanographic Institution. President, New England Chapter, Association for Women in Science, 1985; secretary, Division of Ecology, American Society of Zoologists, 1985-87. Current activities: World Cultural Council. AAAS activities: Council, 1986-89.

Marjorie L. Reaka (marine ecology), 1944; B.A., 1965, University of Kansas; Ph.D., 1975, University of California, Berkeley. With University of Maryland, College Park, since 1975; associate professor since 1981. Previously with Oregon State University; visiting scholar, Harvard University, 1982-83. Landau fellow, 1978-79; Award for Most Outstanding Paper Published, Crustacean Society, 1982; program officer, Division of Ecology, American Society of Zoologists, 1983-85. Current activities: associate editor, *Journal of Crustacean Biology*. AAAS activities: Council, 1986-89.

Mary Beth Saffo (organismal biology, physiological ecology, symbiosis, marine biology, invertebrate zoology), 1948; B.A., 1969, University of California, Santa Cruz; Ph.D., 1977, Stanford University. With University of California, Santa Cruz, since 1985; associate research marine biologist since 1987 and lecturer beginning in 1988. Previously with Swarthmore College; independent investigator, Marine Biological Laboratory, 1979-80 and 1983-84; visiting scholar, University of Washington and University of California, Berkeley, 1981-82. Woodrow Wilson fellow, 1969-70; Miller research fellow, 1976-78; American Association of University Women fellow, 1981-82; program officer, Division of Invertebrate Zoology, American Society of Zoologists, 1985-87. Current activities: Committee to Ensure Equal Opportunity, ASZ.

Council delegates *(eight to be elected for 3-year terms)*

only choose four

X Paula Thornton Beall
John Irvin Bruce
Martha Crouch
Richard B. Forward, Jr.
Franklin D. Hamilton
Marilyn M. Howton
Robert L. Metcalf
Eloy Rodriguez
Paul C. Schroeder
Jules A. Shafer
X Catherine L. Squires
X Geerat J. Vermeij
David Wheat
Richard A. White
X Henry M. Wilbur
Leonard N. Zimmerman

Paula Thornton Beall (biology, physiology), 1946; B.A., 1968, Rice University; M.S., 1970, and Ph.D., 1976, University of Texas. Special lecturer, Texas Woman's University, Houston, since 1987; president, Beall and Associates, Houston, since 1987. Previously with Baylor College of Medicine, Office of Naval Research, and CIBA–Geigy Pharmaceutical Company. Robert Welch graduate fellow, 1968-70. National secretary, Association for Women in Science, 1978-80; Executive Board and Council, 1979-81, and chair, Honors and Awards Committee, 1981-83, Biophysical Society. Current activities: FASEB visiting professor to historically black colleges. AAAS activities: Congressional Fellow Selection Committee, 1979-81; Electorate Nom-

inating Committee, Section on Biological Sciences, 1982-85 (chair, 1984-85).

John Irvin Bruce (parasitology), 1927; B.S., 1953, Morgan State College; M.Sc., 1965, and Ph.D., 1968, Howard University. Professor, University of Lowell, Lowell, Massachusetts, since 1973; director, Center for Tropical Diseases, since 1980. Previously with Metropolitan Hospital, Columbia University, Walter Reed Army Institute of Research, and Agency for International Development; guest scientist, Naval Medical Research Unit (Bethesda, Md.), 1965-68. Editorial Board, *Journal of Experimental Parasitology*, 1971-74; Council, Helminthological Society of Washington, 1973-75. Current activities: Advisory Committees, Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases, and Gorgas Memorial Institute of Tropical and Preventive Medicine.

Martha Crouch (developmental biology of plants), 1951; B.S., 1974, Oregon State University; M.Phil. and Ph.D., 1979, Yale University. With Indiana University, Bloomington, since 1979; associate professor since 1986. National Science Foundation fellow, 1974-77; John Spangler Nicholas Prize, Yale University, 1980. Current activities: Editorial Boards, *Plant Molecular Biology Reporter* and *Plant Physiology*; Board of Trustees, Society for Developmental Biology; vice chair, Gordon Conference on Plant Cell and Tissue Culture.

Richard B. Forward, Jr. (marine biology), 1943; B.A., 1965, Stanford University; Ph.D., 1969, University of California, Santa Barbara. With Duke University since 1971; professor beginning in 1988. Previously with Yale University. Fulbright scholar, 1978. Current activities: editorial advisor, Marine Ecology—Progress Series.

Franklin D. Hamilton (biochemistry, molecular biology), 1942; B.S., 1964, Florida A&M University; Ph.D., 1969, University of Pittsburgh. Director, Research Center Program, and associate professor, Atlanta University, since 1979. Previously with University of Tennessee, Oak Ridge; visiting scientist, University of California, Berkeley, 1986-87. U.S. Public Health Service fellow, 1964-70. Current activities: Minority Access to Research Careers Review Committee, National Institutes of Health–National Institute of General Medical Sciences; Predoctoral Fellowship Review Committee, National Science Foundation–National Research Council; Premedical Program Review Committee, United Negro College Fund; vice chair, Science and Technology Advisory Committee, National Association for Equal Opportunity in Higher Education.

Marilyn M. Howton (biochemistry), 1951; B.Sc., 1972, Memphis State University. Research assistant, Biochemistry Department, West Virginia University Medical Center, Morgantown, since 1980. Previously with V.A. Hospital, Memphis, and V.A. Medical Center, San Francisco.

Robert L. Metcalf (entomology), 1916; B.A., 1939, and M.A., 1940, University of Illinois, Urbana-Champaign; Ph.D., 1942, Cornell University. With University of Illinois, Urbana-Champaign, since 1968; professor emeritus since 1987. Previously with University of California, Riverside. Member, National Academy of Sciences; Charles F. Spencer Award, 1966, and International Award Pesticide Chemistry, 1972, American Chemical Society; CIBA-Geigy Award, 1976, and Memorial Lecture Award, 1978, Entomological Society of America; Founders Award, Society for Environmental Toxicology and Chemistry, 1983; Kenneth P. Dubois Award, Society of Toxicology, 1987; president, ESA, 1958.

Eloy Rodriguez (cellular plant metabolism, phytochemistry, chemical ecology), 1947; B.A., 1969, and Ph.D., 1975, University of Texas, Austin. With University of California, Irvine, since 1976; professor since 1983. Previously with University of Texas, Austin, and University of British Columbia. Fulbright scholar, 1978; National Chicano Council on Higher Education fellow, 1979; Rosser-Rivera lecturer, 1985; chair, Phytochemical Section, Botanical Society of America, 1980-81; secretary and editor, *Newsletter*, International Society of Chemical Ecology. Current activities: vice president, Society for the Advancement of Chicanos and Native Americans in Science; National Academy of Sciences–National Science Foundation Graduate Fellowship Program.

Paul C. Schroeder (comparative reproductive biology and development), 1938; B.S., 1960, St. Peter's College; Ph.D., 1966, Stanford University. With Washington State University, Pullman, since 1968; professor since 1982 and department chair since 1987. Previously with Stanford University; visiting professor, University of Cologne, 1974-75. National Science Foundation fellow, 1966-67; National Institutes of Health fellow, 1967-68; Fulbright fellow and Fogarty international fellow, 1982—; secretary, Division of Comparative Endocrinology, American Society of Zoologists, 1978-80. Current activities: west coast regional editor, *Marine Biology*; associate editor (reproductive biology), *Journal of Experimental Zoology*; Executive Council, International Society of Invertebrate Reproduction.

Jules A. Shafer (enzymology, protein chemistry), 1937; B.Ch.Eng., 1959, College of the City of New York; Ph.D., 1963, Polytechnic Institute of Brooklyn. With University of Michigan, Ann Arbor, since 1969; professor since 1977. Previously with Harvard University. Current activities: Resarch Committee, Henry Ford Hospital; Research Peer Review Committee, American Heart Association, Michigan; chair, Scientific Review Board, Southeast Region, American Red Cross.

Catherine L. Squires (molecular genetics), 1941; B.A., 1963, and M.A., 1967, University of California, Davis; Ph.D., 1972, University of California, Santa Barbara. With Columbia University since 1977; professor since 1987. Previously with Dartmouth College; guest professor, University of Copenhagen, 1981 and 1984. Current activities: Microbial Physiology and Genetics Study Section, National Institutes of Health; Editorial Boards, *Journal of Bacteriology* and *Microbiological Reviews*. AAAS activities: Council, 1986-89.

Geerat J. Vermeij (biology), 1946; A.B., 1968, Princeton University; M.Phil., 1970, and Ph.D., 1971, Yale University. With University of Maryland, College Park, since 1971; professor since 1980. Guggenheim fellow, 1975-76. AAAS activities: Committee on Opportunities in Science, 1983-86.

David Wheat (biology), 1948; B.A., 1970, Pomona College; M.A., 1974, Claremont Graduate School; Ph.D., 1979, Harvard University. With Arthur D. Little, Inc., Cambridge, Massachusetts, since 1980; manager, Agribusiness Unit, since 1987.

Richard A. White (plant anatomy), 1935; B.S. and M.S., 1957, Temple University; M.A., 1960, and Ph.D., 1962, University of Michigan. With Duke University since 1963; professor since 1973 and dean of arts and sciences and Trinity College since 1985. Danforth fellow, 1957-62; National Science Foundation fellow, 1962-63; chair, Pteridology Section, Botanical Society of America, 1974-76. Current activities: Board of Directors and treasurer, Organization for Tropical Studies.

Henry M. Wilbur (zoology), 1944; B.S., 1966, Duke University; Ph.D., 1971, University of Michigan. With Duke University since 1973; currently, professor. Previously with National Science Foundation and University of Michigan Society of Fellows; visiting professor, Mountain Lake Biological Station, 1984-88. Associate editor, *Evolution*, 1979-80, and *Ecology and Ecological Monographs*, 1979-82; Board of Governors, American Society of Ichthyologists and Herpetologists, 1977-80. Current activities: treasurer, American Society of Naturalists; Board of Directors, Highlands Biological Station.

Leonard N. Zimmerman (microbiology), 1923; B.S., 1948, M.S., 1949, and Ph.D., 1951, Cornell University. With Pennsylvania State University, University Park, since 1951; professor since 1963, associate dean for research since 1978, and acting dean, College of Science, since 1987. Current activities: Editorial Board, *Critical Reviews in Microbiology*.

AWIS

ASSOCIATION FOR WOMEN IN SCIENCE, INC.

1346 CONNECTICUT AVENUE N.W. SUITE 1122

WASHINGTON, D.C. 20036

TEL. 833-1998 - AREA CODE 202

Executive Board / 1976 - 78

President: Marion E. Webster, Ph.D. c/o AWIS Washington Office

President-Elect: Judith Ramaley, Ph.D. University of Nebraska Medical Center Omaha, Neb. 68105

Vice President: Estelle Ramey, Ph.D. AWIS Educational Found. Pres. Georgetwn Univ. Sch. of Med. Washington, D.C. 20007

Treasurer: Mary Parlee, Ph.D. Barnard College Columbia Univ. New York, N.Y. 10027

Secretary: Mary L. Moller, Ph.D. Albert Einstein Col. of Med. Bronx, N.Y. 10461

Past President: Anne M. Briscoe, Ph.D. Columbia University Harlem Hosp. Center New York, N.Y. 10037

Councilors:

Anne C. Carter, M.D., State Univ. of N.Y., Downstate Medical Center Brooklyn, N.Y. 11203

Helene N. Guttman, Ph.D. National Heart and Lung Inst. N.I.H. Bethesda, Md. 20014

Margaret W. Hilgartner, M.D. Cornell Univ., Medical College New York, N.Y. 10021

Vera Kistiakowsky, Ph.D. Massachusetts Inst. of Tech. Cambridge, Mass. 02139

Leah Lowenstein, M.D., D.Phil. Boston Univ. School of Medicine Boston, Mass. 02118 AWIS Representative to Fed. Org. for Professional Women

Diane Russell, Ph.D. Univ. of Arizona Medical Center Tucson, Ariz. 85721

Ellen Weaver, Ph.D. San Jose State Univ. San Jose, Cal. 95192

Committee Chairpersons:

Newsletter: Barbara Filner, Ph.D. Columbia Univ., New York, N.Y. 10027

Diana Schneider, Ph.D. Raven Press New York, N.Y. 10036

Registry: Natalia Meshkov, Ph.D. George Mason University Fairfax, Virginia 20041

Affirmative Action: Anna-Riitta Fuchs Rockefeller Univ. New York, N.Y. 10021

Helen C. Davies, Ph.D. Univ. of Penn. Medical School Philadelphia, Pa. 19174

Membership: Edith D. Hendley, Ph.D. Univ. of Vermont Medical School Burlington, Vt. 05401

Profesional Society Membership: Mary Anne Brock, Ph.D. National Institute of Aging N.I.H. at Baltimore City Hosp. Baltimore, Md. 21224

Meetings: East: G. Virginia Upton, Ph.D. Wyeth International Philadelphia, Pa. 19101

Meetings: West: Anna N. Taylor, Ph.D. Univ. of Cal. Los Angeles, Cal. 90024

Constitution and By-Laws: Eleanor I. Franklin, Ph.D. Howard Univ. Medical School Washington, D.C. 20001

Archives: Arlene Hoffman, Ph.D. c/o AWIS Wash. Office

Regionalization: Judith Ramaley, Ph.D.

Chapter Presidents:

Hawaii: Marita Nelson, Ph.D. Univ. of Hawaii Sch. of Med. Honolulu, Hawaii 96822

Metropolitan New York: Mary L. Moller, Ph.D.

Gulf Coast: Naomi Friedmann, Ph.D. Univ. of Texas Medical Sch. Houston, Tex. 77025

Washington, D.C.: Marie Cassidy, Ph.D. George Washington Univ. School of Medicine Washington, D.C. 20037

A.A.A.S. Section Representatives

Chemistry: Nancy Tooney, Ph.D. Polytechnic Inst. of N.Y. Brooklyn, N.Y. 11201

Psychology: Sheila Pfafflin, Ph.D. A.T.&T. New York, N.Y. 10007

Education: Nina Roscher, Ph.D. American University Washington, D.C. 20016

Biological Sciences: Ellen Weaver, Ph.D.

Medical Sciences: Anne Briscoe, Ph.D.

June, 1978

Dear Colleague:

The time has come to implement one of the major goals of AWIS: to enlarge and computerize the Registry of Women in Science and Engineering. AWIS is flooded with requests for candidates for opportunities in industrial, government, and academic institutions.

Where do you come in?

First: Send a copy of your most recent resume.

Second: Fill out and return the enclosed registry form immediately. Please do so whether or not you are job-hunting. *Please complete the registry form even if these data are already included in your resume. Both the completed registry form and resume are needed to secure full representation of your qualifications.*

Third: Support this effort to computerize the registry by sending $10.00 with your form. It costs about $10.00 per name. For some, this may be beyond their present means. Those of us who can should send more.

Even if you cannot afford to send $10.00, please return the completed form.

The registry as a whole will document the numbers and the quality of women in science. *The registry needs you whether or not you are interested in a change of professional affiliation or in serving on a peer review committee.*

A registry of all women in science will answer the backlash against affirmative action: either "there are no qualified women" or "we would like to appoint a woman but cannot find one who is qualified."

Thanking you in advance for your support,

Mary Lee Schneiders
Registrar

Make check payable to AWIS and return completed form and resume in the enclosed envelope to AWIS Washington Office, 1346 Connecticut Ave. NW, Suite 1122, Washington, D.C. 20036. *Please note: a $10.00 registry contribution does not cover membership in AWIS. If you are interested in joining AWIS, write us for more information. However, joining the Association for Women in Science is not a requirement for being listed in the registry.*

Did not send, No point in it.

FOR OFFICE USE ONLY

Registrant No. _____

REGISTRY OF WOMEN IN SCIENCE

Prepared by the Association for Women in Science

The information supplied will be placed on file in a storage and retrieval system and will be available, except as noted on the form, on a non-confidential basis to persons seeking to fill vacancies on advisory bodies and to potential employers. It will also serve as a source of statistical data.

To facilitate transcription to computer-usable format, please type or use a black pen.

USE NO MORE THAN 15 WORDS PER LINE

[A01] **PROFESSIONAL NAME** (10) Howard (Last) (30) Hildegarde (First) (50) _____ (Middle) [A02] (10) Mrs. Henry Anson Wylde (Other Name)

[A01] DATE FORM COMPLETED (70) Aug. (Month) 1978 (Year) YEAR OF BIRTH (74) 19[illegible] (Confidential) CITIZENSHIP (76) (US) CAN ___ OTHER

ADDRESS: Use home or business or both. Indicate which should be used for mailings.

[A03/4] HOME ADDRESS: (10) 2045-Q Via Mariposa East (No. & Street)

Laguna Hills, Calif. (City/State) (70) 92653 (Zip) USE FOR MAIL? (75) ___ Yes or X No

[A05/6] BUSINESS ADDRESS: (10) Chief Curator Emeritus — Note — I am not looking for a job!! (Department, lab and/or office)

Natural History Museum of Los Angeles County (Institution)

900 Exposition Blvd. (Number & Street)

Los Angeles Calif. (City/State) (70) 90007 (Zip) USE FOR MAIL? (75) X Yes or ___ No

[A08] **TELEPHONE:** HOME (10) (A.C.) — — BUSINESS (30) (A.C.) — —

[D01] **DEGREES:** (indicate the highest) (Y1, N2, b0)

(10) YEAR GRANTED OR EXPECTED	(12) STUDENT WORKING FOR DEGREE	(13) DEGREE	(30) SUBJECT	(50) INSTITUTION
1928		(PhD)	Zoology	INST'N. Univ. Calif. Berkeley STATE/CTRY:
		EdD		INST'N. STATE/CTRY:
1926		MA/MS*	Palentology	INST'N. Same STATE/CTRY:
1924		AB/BA/BS*	Zoology	INST'N. Same STATE/CTRY:
		MD		INST'N. STATE/CTRY:
		DDS/DMD*		INST'N. STATE/CTRY:
		DSC/DPM*		INST'N. STATE/CTRY:
		OD		INST'N. STATE/CTRY:
		DO		INST'N. STATE/CTRY:
		DVM		INST'N. STATE/CTRY:
		Other (Specify)		INST'N. STATE/CTRY:

*Circle appropriate degree.

EMPLOYMENT HISTORY (Use no more than 15 words per line.)

[E11-12] CURRENT POSITION: # of years (10)_____ Title (12)_____

[E13-15] Duties (12)_____

[E16-19] Employer (12)_____
Name City State/Ctry.

[E21-22] OTHER MAJOR POSITION: # of years (10)_____ Title (12)_____

[E23-25] Duties (12)_____

[E26-29] Employer (12)_____
Name City State/Ctry.

[E31-32] OTHER MAJOR POSITION: # of years (10)_____ Title (12)_____

[E33-35] Duties (12)_____

[E36-39] Employer (12)_____
Name City State/Ctry.

TYPES OF EXPERIENCE (Check any areas in which you have had experience.)

[G01] *Management or Administration*
(10)__ Academic Institution
(11)__ Government
(12)__ Industry or Non-Profit Institution

Research
(13)__ Basic Research
(14)__ Applied or Developmental Research or Design

Teaching
(15)__ Elementary or Secondary School
(16)__ College or University

(17)__ *Marketing (Sales, Purchasing or Estimating)*

(18)__ *Writing or Editing*

(19)__ *Consulting Services to Institutions*

(20)__ *Professional Services to Individuals (Patient Care, etc.)*

(21)__ *Production, Quality Control or Testing*

(22)__ *Other (specify)*
(23)_____

DESCRIPTION OF SCIENTIFIC AND OTHER SPECIALTIES
(List in order of importance; use no more than 10 words per line.)

Example -- Nutrition, food technology -- surveys, balance studies, cereal proteins

[H01] (A) (10)_____
major scientific specialty

[H02] (B) (10)_____

[H03] (C) (10)_____

[H04] (D) (10)_____

[H05] (E) (10)_____

[HY0] TOTAL YEARS OF EXPERIENCE (10)_____ Years in Specialty Listed Above (A)____ (12) (B)____ (14) (C)____ (16) (D)____ (18) (E)____ (20)

[P10] SPECIALTY CATEGORIES (Choose up to 6 from list on page 4): (10) _____ _____ _____ _____ _____ _____

[I●1/9] FELLOWSHIPS: (10)_____

_____

[J01/9] AWARDS AND HONORS: (10) _____

_____

[K01/9] ADVISORY PANELS AND COMMITTEES: (10) _____

_____

[L01/9] TITLES OF UP TO THREE REPRESENTATIVE PUBLICATIONS:

(10) _____

_____

_____

ADDITIONAL INFORMATION (PATENTS, TEACHING INTERESTS, RELATED EXPERIENCE, etc.):

_____

_____

_____

Information listed below will be confidential.

[P01] ETHNIC GROUP (Check if you wish to be identified with any group.)

____ American Indian or Alaskan Native
____ Asian or Pacific Islander
____ Black/Negro
____ Caucasian/White
____ Hispanic
____ Other (specify)
_____

[P02-9] LANGUAGES

(10) ____	Russian	(10) ____	Italian
(10) ____	German	(10) ____	Arabic
(10) ____	French	(10) ____	Hebrew
(10) ____	Spanish	(10) ____	Other Germanic Languages
(10) ____	Chinese	(10) ____	Other Slavic Languages
(10) ____	Portuguese	(10) ____	Hindi, Urdu
(10) ____	Japanese	(10) ____	Other (specify)
		(10) _____	

[P20] Are you actively searching for employment? (10) ____ yes ____ no

Do you have restrictions on a potential change in employment? (11) ____ yes ____ no Specify:

(12) _____ _____
Geographic Location Other

_____

MEMBER OF AWIS (39) ____ yes ____ no

SIGNATURE _____

Make check payable to AWIS. Return to:

Association for Women in Science, Inc.
Suite 1122
1346 Connecticut Avenue N.W.
Washington, D.C. 20036
Telephone: 202-833-1998

BIOLOGICAL SCIENCES

001 Agronomy
002 Anatomy
003 Animal Mgt
004 Bacteriology
005 Behavior/Ethology
006 Biochemistry
007 Biology
008 Biophysics
009 Botany/Plant Sci
010 Cell Bio/Cytology
011 Developmental Bio
012 Ecology
013 Embryology
014 Entomology
015 Environmental Sci
016 Enzymology
017 Forestry
018 Genetics
019 Histology
020 Horticulture
021 Immunology
022 Marine Bio
023 Microbiology
024 Molec Bio
025 Neurosciences
026 Oncology
027 Parasitology
028 Soil Science
029 Virology
030 Zoology

HEALTH & MEDICAL SCIENCES

031 Allied Health Prof
032 Anaesthesiology
033 Chiropractic
034 Dentistry
035 Dermatology
036 Emergency Med
037 Endocrinology
038 Epidemiology
039 General Med
040 Gerontology
041 Hematology
042 Hospital Admin
043 Internal Med
044 Medical Tech
045 Nuclear Med
046 Nursing
047 Nutrition/Food Sci
048 Ob/Gyn
049 Occup Therapy
050 Ophthalmology
051 Orthopedics
052 Otolaryngology
053 Pathology
054 Pediatrics
055 Pharmacology
056 Physical Therapy
057 Physiology
058 Podiatry
059 Psychiatry
060 Psychology
061 Public/Envir Health
062 Radiology
063 Speech Path/Audiology
064 Surgery
065 Toxicology
066 Veterinary Med

EARTH SCIENCES

067 Archaeology
068 Geography
069 Geology
070 Geophysics/Geochem
071 Hydrology
072 Metallurgy
073 Meteorology
074 Mineralogy
075 Oceanography

PHYSICAL SCIENCES

076 Analytical Chem
077 Applied Physics
078 Astrophys/Astronomy
079 Atomic/Molec Phys
080 Chemistry
081 Classical Fields Phys
082 Condensed Matter Phys
083 Energy Science
084 Fluid/Plasma Phys
085 High Energy/Nucl Phys
086 Inorganic Chem
087 Macromolec/Polym Chem
088 Organic Chem
089 Physical Chem
090 Physics, General

MATHEMATICAL SCIENCES

091 Algebra
092 Analysis
093 Applied Math/Oper Res
094 Computer Science
095 Geometry/Topology
096 Information Sci
097 Logic/Foundations
098 Math, General
099 Statistics/Probability

ENGINEERING & MATERIALS SCIENCE

100 Aerospace Engin
101 Agricult Engin
102 BioMed Engin
103 Chem Engin
104 Civil Engin
105 Design Technology
106 Electrical Engin
107 Engin, General
108 Envir Engin
109 Instrumentation
110 Materials Science
111 Mechan Engin
112 Nuclear Engin
113 Sanitary Engin
114 Structural Engin
115 Systems Engin
116 Textile Science
117 Transport Engin

SOCIAL SCIENCES

118 Anthropology
119 Bioethics
120 Communications
121 Consumer Protection
122 Economics/Polit Sci
123 History of Science
124 Home Economics
125 Law
126 Library Science
127 Linguistics
128 Public Admin
129 Social Work
130 Sociology
131 Women's Studies

132 Paleontology
133 Education
134 Administration/Planning
135 Science Writing/Translating

Filled out and mailed Sept. 23, 1978

STANFORD UNIVERSITY
STANFORD, CALIFORNIA 94305

DEPARTMENT OF POLITICAL SCIENCE

September 1, 1978

Dear Friend:

In recent years many people have become interested in the careers and lives of women who have made significant contributions to American society. Biographies and autobiographies of notable women have been written which both inspire us and add to our knowledge of women's achievements.

Little systematic research has been done, however, which examines the career patterns of women who have attained leadership positions. As researchers interested in understanding the sources and patterns of women's leadership, we think that a large-scale study based on a number of experiences of women in prominent positions in various occupations from across the country is very important. We hope that you will agree with us about the value of this project and will help us by filling out the questionnaire that is enclosed.

A major source of data for this study, which is funded by the Business and Professional Women's Foundation, will be the questionnaire you have received. We would greatly appreciate your completing it and returning it to us at the earliest possible opportunity. The success of our project is dependent upon the degree of response we receive from you and women like you; it is important that the experiences of many different women are represented.

The information collected in these questionnaires, of course, will remain completely anonymous. An identification number is included on the back page only for administrative purposes, and your name will never be linked with your responses.

Filling out the questionnaire should take about 25 minutes. Although there are several pages, many of the questions ask you for straightforward background information, and in other parts of the questionnaire more space is provided for your replies than you will probably need.

Thank you for your time and cooperation.

Sincerely yours,

Kennette Benedict

Kennette Benedict
Project Director

To Mail: No postage or envelope is required to return the questionnaire. Fold the completed questionnaire in half so that the back of the last page faces out and staple or tape edges to seal.

January 1981

Department of Vertebrate Paleontology
Natural History Museum of Los Angeles County
900 Exposition Blvd.
Los Angeles, Calif. 90007

Center for the Social Sciences
Columbia University
420 West 118th Street
New York City, New York 10027

Dear friends,

In response to a request from Harriet Zuckerman and Jonathan R. Cole, I enclose a copy of my curriculum vitae as of 1976. For further information, and for a list of the taxa that I have described as well as a complete bibliography, I also enclose a reprint from Contributions in Science no. 330, published in 1980.

Sincerely yours,

Hildegarde Howard

Hildegarde Howard

Columbia University in the City of New York | New York, N.Y. 10027

CENTER FOR THE SOCIAL SCIENCES 420 West 118th Street

January 15, 1981

Dr. Hildegarde Howard
Natural History Museum
900 Exposition Blvd.
Los Angeles, Calif. 90007

Dear Dr. Howard:

As part of an ongoing program of research supported by the National Science Foundation, we have been studying the careers of men and women scientists, especially those who have received distinguished research fellowships such as those given by the John Simon Guggenheim Memorial Foundation or the National Institutes of Health. It would help us greatly if you would provide us with an up-to-date copy of your curriculum vitae and a complete list of your publications. We enclose a stamped self-addressed envelope for that purpose.

Thank you very much.

Sincerely,

Harriet Zuckerman
Professor of Sociology

Jonathan R. Cole
Professor of Sociology

HAZ/JC:mh

enc.

Columbia University in the City of New York

CENTER FOR THE SOCIAL SCIENCES

420 West 118th Street
New York, N.Y. 10027

March 3, 1981

Dr. Hildegarde Howard
Department of Vertebrate Paleontology
Natural History Museum of Los Angeles County
900 Exposition Boulevard
Los Angeles, California 90007

Dear Dr. Howard,

Many thanks for providing us with a copy of your curriculum vitae and of the festschrift in your honor published in Contributions in Science. Having such information on hand will help us greatly in the collection of our data.

Sincerely,

Harriet Zuckerman
Professor of Sociology

Jonathan R. Cole
Professor of Sociology

HAZ:JRC:mh

Biographical Publications

West Street, St. Ives, Cambridgeshire, PE17 4PL, England
Telephone: 0480 301172

Our ref: SMP/DP/FW

Dear Dr. Howard,

We are pleased to inform you that your biography has been selected to appear in the 1985 edition of Foremost Women of the Twentieth Century, and have pleasure in enclosing a proof of your entry. We should be grateful if you would sign and return this to the above address as soon as possible.

We should like to draw to your attention the fact that there is still time to order a copy of this volume in which your biography will appear, either by payment of the very favourable pre-publication price of $72.50, or payment of $45.00 deposit, a balance of $65.00 being payable upon publication. As you will see from the order form on the reverse of this letter, it is also possible to reserve a copy of this work, the whole sum of $130.00 being payable upon publication.

We should also like to take this opportunity of offering to you the chance to purchase, at a special price, a Certificate of Inclusion. This will be printed on high quality parchment, denoting, in fine script, your name, and the fact that you have been personally selected to appear in the above volume, and is available for $20.00 which includes postage and packing.

Should you so desire, it is also possible for your personal Certificate to be laminated onto a decorative wooden Plaque, ready for display. This process will enhance, preserve and protect your Certificate for all to admire for many years, and the Plaque, including your Certificate and postage and packing, is available for $45.00. For your convenience an order form is to be found on the reverse of this letter, from which you will also see that payment may, of course, be made in sterling if you so wish.

We look forward to receiving your proof, duly signed, at your early convenience.

Yours sincerely,

Susan M Ponder

Susan M. Ponder (Mrs.)
(Editorial Director)

Biographical Publications is the imprint of Miltonport Ltd.
Whose Registered offices are as above
Registered in England No. 1710815

Directors: R. Rayner M.E. Rayner

FOREMOST WOMEN OF THE TWENTIETH CENTURY

RESERVATION FORM

☐	Copy of Foremost Women of the 20th Century Full payment enclosed US$72.50 or £42.00	☐
☐	Copy of Foremost Women of the 20th Century Deposit enclosed US$45.00 or £25.00 Balance on publication US$65.00 or £33.00	☐
☐	Copy of Foremost Women of the 20th Century US$130.00 or £72.00 To be billed on publication	☐

Please despatch my Certificate of Inclusion at a price of	Payment enclosed $20.00 or £11.00	☐
I require . . . . . additional certificates at a special price of	$17.50 or £9.50	☐
Please despatch . . . . . decorative Plaques at a price of	$45.00 or £25.00	☐

Total Payment enclosed
(postage & packing free) _____

Payment may be made by cheque (exchange control permitting) International Money Order, U.N.E.S.C.O. Coupons or Eurocheque (bearing card number) or your order may be charged against Mastercard, EuroCard, Access or American Express account; please quote your card number below, indicate account to be charged and sign.

MasterCard ☐ Access ☐ EUROCARD ☐ ☐

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature: _____

EXPIRY DATE _____

NAME: _____

FULL POSTAL ADDRESS: _____

_____

_____

MAIL TO: Biographical Publications,
West Street, St. Ives,
Cambridgeshire, PE17 4PL, England.

By air mail
Par avion

Biographical Publications
West Street, St. Ives,
Cambridgeshire, England PE17 4PL

HUNTINGDON
-1.11.84
CAMBS.

GREAT BRITAIN
31
PBT 2137N
POSTAGE PAID

Foremost Women of the 20th century

dated
Rec'd Nov. 13, 1984
(received on 14th)

BP

FOREMOST WOMEN OF THE TWENTIETH CENTURY

1985 Edition

Scheduled for publication Spring 1985

Dear Reader,

In this, the latter part of the 20th Century, a Century which has seen great progress, not least in the field of women's rights and opportunities, we feel that it would be of great interest and benefit to many people to place on record a selection of the achievements and accomplishments of leading women throughout the world, in order to encourage those of future generations to endeavour to achieve their full potential.

Here in this ancient County of Cambridgeshire, which lies near to our capital city of London, seat of the Suffragette movement which led directly to the emancipation of women, both in England and many other countries, we propose to publish an entirely new work entitled "Foremost Women of the Twentieth Century", devoted solely to the careers of distinguished women such as yourself.

Our aim in publishing this work lies in our certainty that by reading of these distinguished careers, many of which were pursued in the earlier part of this century only against much discrimination and opposition, and achieved only by making great sacrifices, the youth of today and tomorrow will be both encouraged and inspired to use their abilities to the utmost, and to take full advantage of the opportunities so hardly won for them.

I should therefore like to invite you, as one of a carefully selected number of eminent women, to complete and return this questionnaire to us for our consideration as soon as possible, in order that our editors may prepare your entry, and send a proof for your approval before publication. There is, of course, no charge whatsoever for inclusion in this work.

All biographies will appear in an extremely readable form and, upon publication, copies of this volume will be forwarded to important libraries, institutions and centres of learning in many countries, including the United Kingdom and the United States of America.

Should you wish to own a copy of this important work, we should like to draw to your attention the very advantageous pre-publication offer, strictly limited to those whose careers appear therein, printed on the back page of this questionnaire.

Should you have personal knowledge of any person whose career you consider would enhance this volume, we should be most happy to extend an invitation to them upon receipt of their names and addresses.

I do hope that you will feel able to participate in this important record of distinguished and leading women of the 20th Century, and I look forward with much interest to receiving your completed questionnaire. I should also like to thank you for your attention and cooperation.

Please reply to:
Biographical Publications
West Street, St Ives
Cambridgeshire PE17 4PL
England

Yours sincerely,

Margaret E. Rayner

Margaret E Rayner (Mrs)
(Chairman)

It will assist our editors if this completed questionnaire is returned to us by

Priority Order Form

FOR ENTRANTS ONLY

Please despatch to the address below copy/copies of the 1985 edition of

FOREMOST WOMEN OF THE TWENTIETH CENTURY

which, as a participant, I may purchase at the advantageous pre-publication price listed below.

.... **copy/copies of** Foremost Women of the Twentieth Century — Full payment enclosed US$62.50 or £35.00 Sterling ☐

.... **copy/copies of** Foremost Women of the Twentieth Century — Deposit enclosed US$40.00 or £23.00 Sterling ☐

(Balance of US$55.00 or £27.00 Sterling to be billed on publication)

.... **copy/copies of** Foremost Women of the Twentieth Century — US$110.00 or £65.00 Sterling *to be billed on publication* ☐

Total Payment enclosed (postage & packing free) _____

Payment may be made by cheque *(exchange control permitting)* International Money Order, U.N.E.S.C.O. Coupons or Eurocheque *(bearing card number)* or your order may be charged against Mastercard, EuroCard or Access account; please quote your card number below, indicate account to be charged and sign.

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ Signature: _____

NAME: _____

FULL POSTAL ADDRESS: _____

_____

_____

MAIL TO: Biographical Publications,
West Street, St. Ives,
Cambridgeshire, PE17 4PL, England.

Biographical Publications is the imprint of Miltonport Ltd., whose registered offices are at West Street, St. Ives, Cambridgeshire

SEALED UNDER PERMIT
PETERBOROUGH 14
PRINTED PAPER

HUNTINGDON
28.3.84
CAMBS.

GREAT BRITAIN
14½
P.B.T 2137N
POSTAGE PAID

Mrs. Henry A. Wylde,
2045-Q Via Mariposa F,
Laguna Hills,
CA 92653,
USA

BP

Biographical Publications
West Street, St. Ives,
Cambridgeshire, England PE17 4PL

36
59
95

20
105

Bios ||||-||||-||||-||||

Long Bio 1

1

||||1

Calif.

Mexico ||||1

New Mex 11

Nevada 111

Oregon 1

Patagonia

Biographical Details

Mailed at O.U. April 12, 1984

Please complete the details listed within this questionnaire as clearly as possible *(typewritten much preferred)* to enable our editors to compile your entry with as much accuracy as possible.

Letter of the Alphabet under which you wish your entry to be listed. H

Surname: HOWARD Given Names: HILDEGARDE

Place of Birth: Washington, D.C. U.S.A. Date of Birth: 3 Day Apr Month 1901 Year

Married on: 6 Day Feb. Month 1930 Year To: Henry Anson Wylde
celebrated 54th anniversary 1984

Number of Children: none Sons: none Daughters:

Details of Education *(please give dates. Degrees, Diplomas, etc.)*:
University of California, Los Angeles 1920-1922--Junior Certificate
University of California, Berkeley 1922-1928-- B.A., M.A., Ph D

Present Profession/Occupation:
Emeritus Chief Curator Science, Natural History Museum, Los Angeles County

Previous Professional Employment *(Please list in order finishing with your last position)*:
1928-1961 Los Angeles County Museum of History Science and Art
(now known as Natural History Museum of Los Angeles County)
Asst. Vertebrate Paleontologist 1928-1938;
Curator of Avian Paleontology 1938-1951
Chief Curator Division of Science 1951-1961

Compositions, Publications, Works of Art etc:
Scientific articles and/or monographs on fossil birds of the United States, Mexico, and Patagonia (1923-1982--and one in press) including section on AVES for the Encyclopedia of Paleontology (1979)
(New Zealand)

Memberships of Associations, or Societies etc. *(with any offices held)*: Fellow Amer. Ornithologists Union, Geological Soc. Amer., Calif. Acad. Sci, Amer. Assoc. for Advancement of Sci., So. Calif. Acad. Sci. (President 1957-59; Bd. Directors-Advisory Bd. 1952-), Honorary Life Member Cooper Ornithological Soc. (Bd Directors 1938-1968, Pres. So. Div. 1957-59). Soroptimists International (Honorary)

Honours, Prizes, Awards *(with dates)*:
University Fellow in Zoology, Univ. Calif. Berkeley 1927-28;
Brewster Memorial Award in Ornithology (Amer. Ornith. Union) 1953
John Simon Guggenheim Foundation Fellow 1962-63; Festschrift from Los Angeles County Museum 1980

Other biographical works in which you are recognised: Who's Who in America;
Who's Who of American Women; Who's Who in the World (3rd ed.);
American Men and Women of Science

Hobbies: Walking, writing, bridge

Address for publication: Dr. Hildegarde Howard
Department of Vertebrate Paleontology
Natural History Museum of Los Angeles County
~~900~~ Exposition Blvd.
Los Angeles, California 90007

Signature: Hildegarde Howard Wylde

Address for correspondence *(if different from above)*:
2045-Q Via Mariposa East
Laguna Hills, California 92653

département des sciences de la terre

Cécile Mourer-Chauviré

Le 19 juillet 1984

to Mrs Hildegarde Howard

Dear Mrs Howard,

I thank you for your letter of June, 16, 1984. I am sorry you did not review our manuscript on Sylviornis. Your comments are always much appreciated.

I know Mrs Pouyet send the manuscripts submitted to Geobios to the referees without previous inquiry. She is in charge of Geobios and she is also the chairman of the department. She is very overworked.

Finally she did not send our manuscript to another referee and the Reading Committee accepted it with only a review by Pierce. I am glad she did not send it to Pat Rich because, some years ago, there has been a problem between Pat Rich and Poplin about Sylviornis. I don't remember exactly the details but, when Pat heard a large bird had been found in New Caledonia and was under study by Poplin, she went to New Caledonia and made some excavations in the same site where the bones Poplin was studying had been found.

Poplin had not a very good material but he did not accept the bird was given a name by somebody else. So he wrote a paper to create the name Sylviornis neocaledoniae, and placed the bird in the Ratites. It was the most satisfactory assignment with the material he had at this time. Pat Rich also published, in Hemisphere, a paper on the material she found in New Caledonia.

I was very interested to learn you have another Megapaloelodus in Sharktooth Hill. Maybe Megapaloelodus was living in a more marine environment than Palaelodus ? Jacques Cheneval was applying for a job as a research worker in CNRS, and he almost got it, but unfortunately it is now probable he will not get it this year. He has to wait until next year, to apply again.

With my best wishes,

yours sincerely,

C Mourer

université claude-bernard lyon1
27.43 bd du 11 novembre 69622 villeurbanne cedex tél. (7) 889.81.24

California Academy of Sciences

Natural History
Museum
& Aquarium

November 4, 1987

Dr. Hildegard Howard
2045-Q Via Mariposa East
Laguna Hills, CA 92653

Dear Dr. Howard:

The Academy recently launched a direct mail campaign to recruit new members. We used other organizations' mailing lists, which were run through a special computer program to sort out our present donors. Occasionally, names slip by us. Unfortunately, yours was one of those.

Please accept my apology, and thank you for being a vital member of the Academy. Your support is truly appreciated.

Sincerely,

Jennie Watson

Jennie Watson
Membership Coordinator

Golden Gate Park San Francisco, California 94118 (415) 221-5100

California Academy of Sciences

Natural History Museum & Aquarium

SAN FRANCISCO, CA 94164 PM 9 NOV 1987

SAN FRANCISCO CALIF NOV 9 '87 CHILDREN'S FUND $.21

rec'd Nov 12/87

Dr. Hildegarde Howard
2045-Q Via Maripos a East
Laguna Hills, CA 92653

Explains why I got an invitation to be a member when I am one.

Golden Gate Park San Francisco, California 94118-9961

Mailed data Sept. 1990
Exec comm attachment

JOHN SIMON GUGGENHEIM MEMORIAL FOUNDATION

90 PARK AVENUE, NEW YORK, NY 10016 (212) 687-4470

May, 1990

Dear Fellow:

I write to seek your help as we begin a new effort to bring up to date the information in our archive of materials about Fellows.

Please use the attached sheet to indicate your home address and your institutional title and address (if any). We would like to have both addresses--if this letter reaches you at your office, please simply fill out the section on home address, and vice versa.

We would also be particularly interested to learn of recent awards, honors, promotions, or other marks of distinction that you have received in the past few years and to have a list of your recent exhibitions, performances, recordings, or publications.

You may simply wish to send us a recent version of your curriculum vitae in addition to, or instead of the attached sheet.

Please return the form or CV (or both) in the enclosed postage-paid envelope at your earliest convenience.

With all good wishes.

Cordially yours,

Peter Kardon

Peter Kardon
Director of Planning

California Academy of Sciences

Research Division

3 April 1992

Fellows
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

Dear Academy Fellow:

The Fellows' Steering Committee is developing a biographical database of the Fellowship in order to assess the diversity of scientific fields represented by current Fellows. Such a database would be used to bring you into closer contact with the current programs of the Academy and help with the development of programs that will be of interest to you.

The Fellows have been successful in initiating several programs that have gone on to become valuable aspects of the Academy's research and educational programs. For example, several years ago the Fellows' Steering Committee instituted the Biology Forum series, a program of three weekend meetings for high school science teachers. This year, like the past several years, the meetings were attended by almost 200 teachers. A number of the teachers have requested speakers on particular topics, which might be part of the current research programs of some of the Fellows. The database would assist us in helping these teachers obtain information for their classes.

The Steering Committee is exploring the possibility of establishing a summer mentorship program for high school students with demonstrated interests in science. If you would be interested in serving as a mentor please indicate your interest on the enclosed questionnaire. We will attempt to put you in contact with interested and qualified high school students.

In order to help us build a database on the scientific interests of the Fellows, we would greatly appreciate a copy of your CV and bibliography of recent publications. Please send these, along with the questionnaire to Patricia Dal Porto, who now serves as Secretary/Coordinator to the Fellows.

Thank you very much for your help.

Cordially,

W.A. Clemens

W.A. Clemens
Chairman, Fellows' Steering Committee

Encl.
WAC:pdp

California Academy of Sciences Golden Gate Park San Francisco, California 94118-4599 415/750-5100
Home of Steinhart Aquarium and Morrison Planetarium
fax 415/750-7346 or 750-7106 Research Office 415/750-7277

California Academy of Sciences

Patricia Dal Porto
Fellows Steering Committee

California Academy
of Sciences
Golden Gate Park
San Francisco, California
94118-4599

show + Joan DONE

FILE

SAN FRANCISCO APR-9'92 CA
PB METER 6751402
U.S.POSTAGE ≈0.29≈

Hildegarde Howard
2045-Q Via Mariposa East
Laguna Hills, CA 92653

had Alan's (?)

mailed Information
April 17, 1992

included Joan's
address + they'll forward
she is married so who
might be interested in
the internship program
Assistant Director

Home of Steinhart Aquarium and Morrison Planetarium

Copy of what I wrote on the form they sent me

Copy of what I sent Gu...

MEMBERSHIPS:

Fellow: Geological Society of America
American Ornithologists Union
American Association for the Advancement of Scien...

California Academy of Sciences
Southern ~~California Academy of Sciences~~ of Sciences

Honorary Life Member: Cooper Ornithological Society
Society of Vertebrate Paleontology

Member: Society of Avian Paleontology and Evolution

In 1980 I received an honorary Festschrift from the Natural History Museum of Los Angeles COunty. This includes statements from two of thedirectors under whom I served, and an introductory chapter by the Editor, Dr. Kenneth E. Campbell Jr., regarding my scientific contributions to that date, with a list of publications (1923-1979) and a list of avian taxa described (1 family, 12,genera, 52 species).

Publications since 1980 are as follows:

1981. The Vertebrate Fossils of the Marine Cenozoic San Mateo Formation at Oceanside, California (with Barnes, Hurchison and Welton) IN Geologic Investigations of the San Diego Plain, edited by Patrick L. Abbott and Shannon O'Dunn, pp. 1-vii.

1981. A New Species of Murre, genus Uria,from the Late Miocene of California (Aves, Alcidae. Bull. So. Cal. Acad. Sci., 80 (1), 1-12.

1982. Fossil Birds from Tertiary Marine Beds at Oceanside, San Diego C unty, California, with descriptions of two new species of the genera Uria and Cepphus (Aves: Alcidae). LACM Contributions in Science 341:1-15.

1983. A List of the Extinct Fossil Birds of California. Bull So. Cal. Acad. Sci. 82:1-11.

1984. Orange COunty's Fossil Birds. Natural Sciences of Orange C unty Vol. 1, pp. 27-32. (Pub. by Nat. Hist. FD Orange Co.)

1984. Additional Avian Records from the Miocene of Kern C unty, California With the Description of a New Species of Fulmar (Aves: Procellariidae) Bull. So. Calif. Acad. Sci. 83:84-89.

1987. Review: Avian Biology Vol. VIII Chapter 2, the Fossil Record of Birds by Storrs L. Olson. Wilson Bull. 99(2) 297-298.

1987. Howard H. and G. Barnes. Middle Miocene Marine Birds from the Foothills of the Santa Ana Mountains, Orange C unty, California. Contrib. Sci. LACM 383, 9 pp/

IN PRESS. New Records of Middle Miocene Anseriform Birds from Kern County, Caloformia.